

(12) United States Patent Zarnitsyn et al.

(54) METHODS AND DEVICES FOR THE TREATMENT OF OCULAR DISEASES IN **HUMAN SUBJECTS**

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(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: 15/001,610

(22)Filed: Jan. 20, 2016

Prior Publication Data (65)

> US 2016/0206628 A1 Jul. 21, 2016

Related U.S. Application Data

Continuation of application No. 14/441,151, filed as application No. PCT/US2013/069156 on Nov. 8, 2013.

(Continued)

(51) **Int. Cl.** A61K 31/4439 (2006.01)A61K 47/12 (2006.01)(Continued)

(52) U.S. Cl. CPC A61K 31/4439 (2013.01); A61K 9/0019 (2013.01); A61K 9/0048 (2013.01); (Continued)

US 9,636,332 B2 (10) Patent No.: (45) **Date of Patent:** *May 2, 2017

(58) Field of Classification Search

CPC A61K 31/573; A61K 2300/00; A61K 2039/505; A61K 2039/54; A61K 31/4439;

(Continued)

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ABSTRACT

Methods and devices are provided for targeted non-surgical administration of a drug formulation to the suprachoroidal space (SCS) of the eye of a human subject for the treatment of a posterior ocular disorder or a choroidal malady. In one embodiment, the method comprises inserting a hollow microneedle into the eye at an insertion site and infusing a drug formulation through the inserted microneedle and into the suprachoroidal space of the eye, wherein the infused drug formulation flows within the suprachoroidal space away from the insertion site during the infusion. In one embodiment, the fluid drug formulation comprises drug nanoparticles or microparticles.

17 Claims, 38 Drawing Sheets

